

Engineering Materials MCQ Question Answer

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Question: 1. Annealing of white cast iron results in production of

- Option A. Malleable iron
- Option B. Nodular iron
- Option C. Spheroidal iron
- Option D. Grey iron

Question: 2. Stress relaxation is the phenomenon

- Option A. In which parts are not loaded
- Option B. In which stress remains constant on increasing load
- Option C. In which deformation tends to loosen the joint and produces a stress reduced
- Option D. Stress reduces on increasing load

Question: 3. The elastic stress strain behaviour of rubber is

- Option A. Linear
- Option B. Nonlinear
- Option C. Plastic
- Option D. No fixed relationship

Question: 4. The aluminium alloy, mainly used, for anodized utensil manufacture, is

- Option A. Duralumin
- Option B. Y-alloy
- Option C. Magnalium
- Option D. Hindalium

Question: 5. Thermoplastic materials are those materials which

- Option A. Are formed into shape under heat and pressure and results in a permanently hard product
- Option B. Do not become hard with the application of heat and pressure and no chemical change occurs
- Option C. Are flexible and can withstand considerable wear under suitable conditions
- Option D. Are used as a friction lining for clutches and brakes

Question: 6. The coke in the charge of blast furnace

- Option A. Controls the grade of pig iron
- Option B. Acts as an iron bearing mineral
- Option C. Supplies heat to reduce ore and melt the iron
- Option D. Forms a slag by combining with impurities

Question: 7. An alloy steel which is work hardenable and which is used to make the blades of

bulldozers, bucket wheel excavators and other earth moving equipment contain iron, carbon and

- Option A. Chromium
- Option B. Silicon
- Option C. Manganese
- Option D. Magnesium

Question: 8. Basic solution is one which has pH value

- Option A. Greater than 7
- Option B. Equal to 7
- Option C. Less than 7
- Option D. pH value has nothing to do with basic solution

Question: 9. Bronze contains

- Option A. 70% copper and 30% zinc
- Option B. 90% copper and 10% tin
- Option C. 85 - 92% copper and rest tin with little lead and nickel
- Option D. 70 - 75% copper and rest tin

Question: 10. Which of the following statement is wrong?

- Option A. Steel with 0.8% carbon is wholly pearlite
- Option B. The amount of cementite increases with the increase in percentage of carbon in iron
- Option C. A mechanical mixture of 87% cementite and 13% ferrite is called pearlite
- Option D. The cementite is identified as round particles in the structure

Question: 11. According to Indian standard specifications, plain carbon steel designated by 40 C8 means that the carbon content is

- Option A. 0.04 %
- Option B. 0.35 to 0.45 %
- Option C. 0.4 to 0.6 %
- Option D. 0.6 to 0.8 %

Question: 12. White cast iron has

- Option A. Carbon in the form of carbide
- Option B. Low tensile strength
- Option C. High compressive strength
- Option D. All of these

Question: 13. The cupola is used to manufacture

- Option A. Pig iron
- Option B. Cast iron
- Option C. Wrought iron
- Option D. Steel

Question: 14. By severely deforming a metal in a particular direction it becomes

- Option A. Ductile
- Option B. Malleable
- Option C. Homogeneous
- Option D. Anisotropic

Question: 15. Cast iron has

- Option A. High tensile strength
- Option B. Its elastic limit close to the ultimate breaking strength
- Option C. High ductility
- Option D. All of the above

Question: 16. Age-hardening is related with

- Option A. Stainless steel
- Option B. Gun metal
- Option C. German silver
- Option D. Duralumin

Question: 17. For the allotropic forms of iron, the points of arrest are

- Option A. The points where no further change occurs
- Option B. Constant for all metals
- Option C. The points where there is no further flow of metal
- Option D. The points of discontinuity

Question: 18. The ultimate tensile strength and yield strength of most of the metals, when temperature falls from 0 to 100°C will

- Option A. Increase
- Option B. Decrease
- Option C. Remain same
- Option D. First increase and then decrease

Question: 19. Hardness of lower bainite (tempered martensite) is about

- Option A. RC 65
- Option B. RC 48
- Option C. RC 57
- Option D. RC 80

Question: 20. Monel metal is an alloy of

- Option A. Nickel and copper
- Option B. Nickel and chromium
- Option C. Nickel, Chromium and iron
- Option D. Copper and chromium

Question: 21. Cupola produces following material

- Option A. Cast iron
- Option B. Pig iron
- Option C. Wrought iron
- Option D. Malleable iron

Question: 22. Lead is poured into the joint between two pipes. These pipes may be made of

- Option A. Cast iron
- Option B. Vitrified clay
- Option C. Asbestos cement
- Option D. Concrete

Question: 23. The silicon steel is widely used for

- Option A. Connecting rods
- Option B. Cutting tools
- Option C. Generators and transformers in the form of laminated cores
- Option D. Motor car crankshafts

Question: 24. Corundum contains more than 95%

- Option A. Steel
- Option B. Al_2O_3
- Option C. SiO_2
- Option D. MgO

Question: 25. Which of the following statement is correct?

- Option A. The product produced by blast-furnace is called cast iron
- Option B. The pig iron is the name given to the product produced by cupola
- Option C. The cast iron has high tensile strength
- Option D. The chilled cast iron has no graphite

Question: 26. Recrystallisation temperature can be lowered by

- Option A. Purification of metal
- Option B. Grain refinement
- Option C. Working at lower temperature
- Option D. All of the above

Question: 27. The machinability of aluminium increases when _____ is added to aluminium.

- Option A. Copper
- Option B. Magnesium
- Option C. Silicon
- Option D. Lead and bismuth

Question: 28. Dye penetrant method is generally used to locate

Option A. Core defects

Option B. Surface defects

Option C. Superficial defects

Option D. Temporary defects

Question: 29. The presence of sulphur in pig iron makes

Option A. It easily machinable

Option B. It brittle

Option C. It hard

Option D. The casting unsound

Question: 30. Which of the following is added in low carbon steels to prevent them from becoming porous?

Option A. Sulphur

Option B. Phosphorus

Option C. Manganese

Option D. Silicon

Answer Sheet

1	A	
2	C	
3	B	
4	D	
5	B	
6	C	
7	C	
8	A	
9	B	
10	C	
11	B	
12	D	
13	B	
14	D	
15	B	
16	D	
17	D	
18	A	
19	C	
20	A	
21	A	
22	A	
23	C	
24	B	
25	D	
26	D	
27	D	
28	B	
29	D	
30	D	